

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill, or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE

1. TYPE OF WELL

Oil Well ☐ Gas Well ☒ Other: _____

2. NAME OF OPERATOR

Black Hills Gas Resources, Inc.

3. ADDRESS AND TELEPHONE NO.

PO Box 249

Bloomfield

NM

87413

CONTACT: Lynn Benally

PHONE: 505.634.1111 Ext. 27

Fax: 505.634.1116

4. LOCATION OF WELL (Footage, T, R, M, or Survey Description)

735' FNL

705' FWL

Sec. 9

T 29N

R 3W

5. LEASE SERIAL NO.

Contract 451

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Jicarilla Apache Nation

7. IF UNIT OR CA, AGREEMENT DESIGNATION

8. WELL NAME AND NO.

Jicarilla 451-09 11

9. API WELL NO.

30-039-27799

10. FIELD AND POOL, OR EXPLORATORY AREA

East Blanco / Pictured Cliffs

11. COUNTY OR PARISH, STATE

Rio Arriba

New Mexico

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Reclamation☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (start/resume)☐ Reclamation☒ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☐ Other

13. Describe Proposed or completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/BIA.

Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

The location was permitted for Black Hills Gas Resources, Inc. (Black Hills) with an Application for Permit to Drill (APD) submitted to the Bureau of Land Management (BLM) in Farmington, New Mexico, and the New Mexico Oil Conservation Division (NMOCD) on April 2, 2004. This APD was given API# 30-039-27799 and approved by the BLM on June 22, 2004. Black Hills proposed to re-enter and horizontally drill this location with a southeast lateral bore. End of lateral bore is anticipated to be 1,200' FNL and 100' FEL (NE/4 NE/4) of Section 9 T29N R3W. Please find: Revised Drilling Program, BOP Diagram, Hydrogen Sulfide Drilling Operations Plan and Horizontal Drilling Plan.

Please send a copy of all correspondence to Banko Petroleum Management Inc. at 385 Inverness Parkway, Suite 420, Englewood, CO 80112-5849. Please contact David Banko or Kathy Schneebeck at 303-820-4480, or at david@banko1.com or kathys@banko1.com, respectively, if you have any questions. Thank you.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Kathy L. Schneebeck

Title: Permit Agent for Black Hills Gas Resources, Inc.

Signature

Kathy L. Schneebeck

Date: June 14, 2005

Approved by:

Jim Lovato

Title

Petr. Eng.

Date

7/5/05

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

DISTRICT I
1825 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1501 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number	*Pool Code 72400	*Pool Name East Blanco/Pictured Cliffs
*Property Code 24245	*Property Name JICARILLA 451-9	*Well Number 11
*OGSD No. 013925	*Operator Name Black Hills Gas Resources, Inc.	*Elevation 7037'

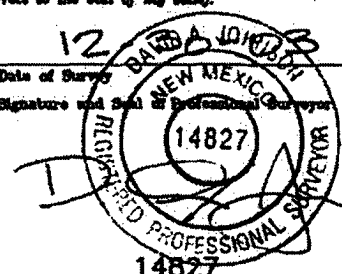
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	9	29-N	3-W		735	NORTH	705	WEST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no. A	Section 9	Township 29N	Range 3W	Lot Idn	Feet from the 1200	North/South line N	Feet from the 100	East/West line E	County Rio Arriba
*Dedicated Acres 160 acres = NW/4 320		*Joint or Infill		*Consolidation Code		*Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 FD. U.S.G.L.O. 2 1/2" BC. 1917 735' 705'	N 89-56-41 E 2638.93' (M)	FD. U.S.G.L.O. 2 1/2" BC. 1917	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <u>Kathy L. Schneebeck</u> Printed Name Kathy L. Schneebeck Permit Agent for Black Hills Gas Resources, Inc. Title June 14, 2005 Date
S 00-03-09 E 2640.54' (M) LAT. 36°44'41"N (NAD 83) LONG. 107°09'46"W	9		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey <u>12</u> Signature and Seal of Professional Surveyor  Certificate Number <u>14827</u>
FD. U.S.G.L.O. 2 1/2" BC. 1917			

Black Hills Gas Resources, Inc.

Jicarilla 451-09 11

API #30-039-27799

Surface: 735' FNL 705' FWL (NW/4 NW/4)

T29N R3W Sec. 9

End of Horizontal Hole: 1,200' FNL 100' FEL (NE/4 NE/4)

T29N R3W Sec. 9

Rio Arriba County, New Mexico

Lease: Contract 451

DRILLING PROGRAM

This Sundry Notice is submitted per CFR 3162.3-2. The existing well pad and reserve pit will be utilized "as is."

This is a horizontal entry into and a deepening of the existing well Jicarilla 451-09 11 to the Pictured Cliffs Formation. See also the attached Horizontal Re-completion Plan.

SURFACE FORMATION – San Jose. Surface water protection plan: Surface casing will be cemented to surface.

GROUND ELEVATION – 7,037' GL

ESTIMATED FORMATION TOPS (Water, oil, gas and/or other mineral-bearing formations).

All Depths are True Vertical Depth (TVD)

San Jose	Surface	Sandstone, shales and siltstones
Nacimiento	2,157'	Sandstone, shales and siltstones
Ojo Alamo	3,126'	Sandstone, shales and siltstones
Kirtland	3,343'	Sandstone, shales and siltstones
Fruitland Coal	3,550'	Sandstone, shales and siltstones
Pictured Cliffs	3,674'	Sandstone, shales and siltstones
Lewis	3,764'	Sandstone, shales and siltstones

TOTAL DEPTH 3,670.45' TVD (end of horizontal hole) 4,499.11' TVD (anticipated horizontal section)
8,227.32' MD

Estimated depths of anticipated fresh water, oil, or gas:

Tertiary

Pictured Cliffs 3,674' Gas

RE-ENTRY – HORIZONTAL DRILLING PROGRAM

- A) A 2,000-psi WP double-gated BOP will be installed on the tubing head with blind rams on bottom and pipe rams on top controlled by an accumulator placed within easy access to drill and other crew members.
- B) No annular preventor will be placed above BOP stack.
- C) Perforations at 1,342' – 1,465' and 2,040' – 2,145' (San Jose); 2,195' – 2,389', 2,573' – 2,790', and 2,862' – 3,026' (Nacimiento); 3,161' – 3,178' (Ojo Alamo) and 3,680' – 3,750' (Pictured Cliffs). Ojo Alamo will be squeeze cemented prior to drilling.
- D) Retrievable whipstock to be set at $\pm 3,690'$.
- E) Window to be milled out of 5-1/2" csg at $\pm 3,674' - 3,690'$.

- F) Kick Off Point is estimated to be at 3,678' based on collar locations located by CBL-CCL on September 7, 2004 at 3,580', 3,624', 3,669', and 3,713' (MD KB).

CASING PROGRAM

True Vertical Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0' – 277'	12-1/4"	8-5/8"	K-55 24# ST&C	To surface (previously set)
0' – 3,803'	7-7/8"	5-1/2"	K-55 15.5# LT&C	To surface (previously set)
3,678' – 8,227' (MD)	4-3/4"	Open hole	None	None

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and protected.

PRESSURE CONTROL

BOPs and choke manifold will be installed and pressure tested before drilling out under surface casing (subsequent pressure test will be performed whenever pressure seals are broken), and then will be checked daily as to mechanical operating condition. BOP's will be pressure tested at least once every 30 days. Ram type preventors and related pressure control equipment will be pressure tested to 1,000 psi. Annular type preventor will be pressure tested to 50% of the rated working pressure, not to exceed 1,000 psi. All casing strings will be pressure tested to 0.22 psi/ft. or 1,000 psi, whichever is greater, not to exceed 70% of internal yield.

BOP to be either double gate rams or an annular preventor as per Onshore Order No. 2.

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with Onshore Order No. 2 for 2M systems.

A remote accumulator will be used. Pressures, capacities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.

MUD PROGRAM

3,678' - 8,227' MD Low solids non-dispersed
M.W. 8.5 – 9.2 ppg
Vis – 28 – 50 sec
W.L. 15cc or less

Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at wellsite.

AUXILIARY EQUIPMENT

- A) A Kelly cock will be kept in the drill string at all times
- B) Inside BOP or stab-in valve (available on rig floor)
- C) Mud monitoring will be visually observed
- C) Testing: None anticipated.

LOGGING, CORING, TESTING PROGRAM

- A) Logging: CBL-CCL log will be run prior to beginning squeeze work.
- B) Coring: None
- C) Testing: None

ABNORMAL CONDITIONS

- A) Pressures: No abnormal conditions are anticipated
Bottom hole pressure gradient – 0.31 psi/ft
- B) Temperatures: No abnormal conditions are anticipated
- C) H₂S: See H₂S Plan if H₂S is encountered.
- D) Estimated bottomhole pressure: 1,138 psi

ANTICIPATED START DATE

July 15, 2005

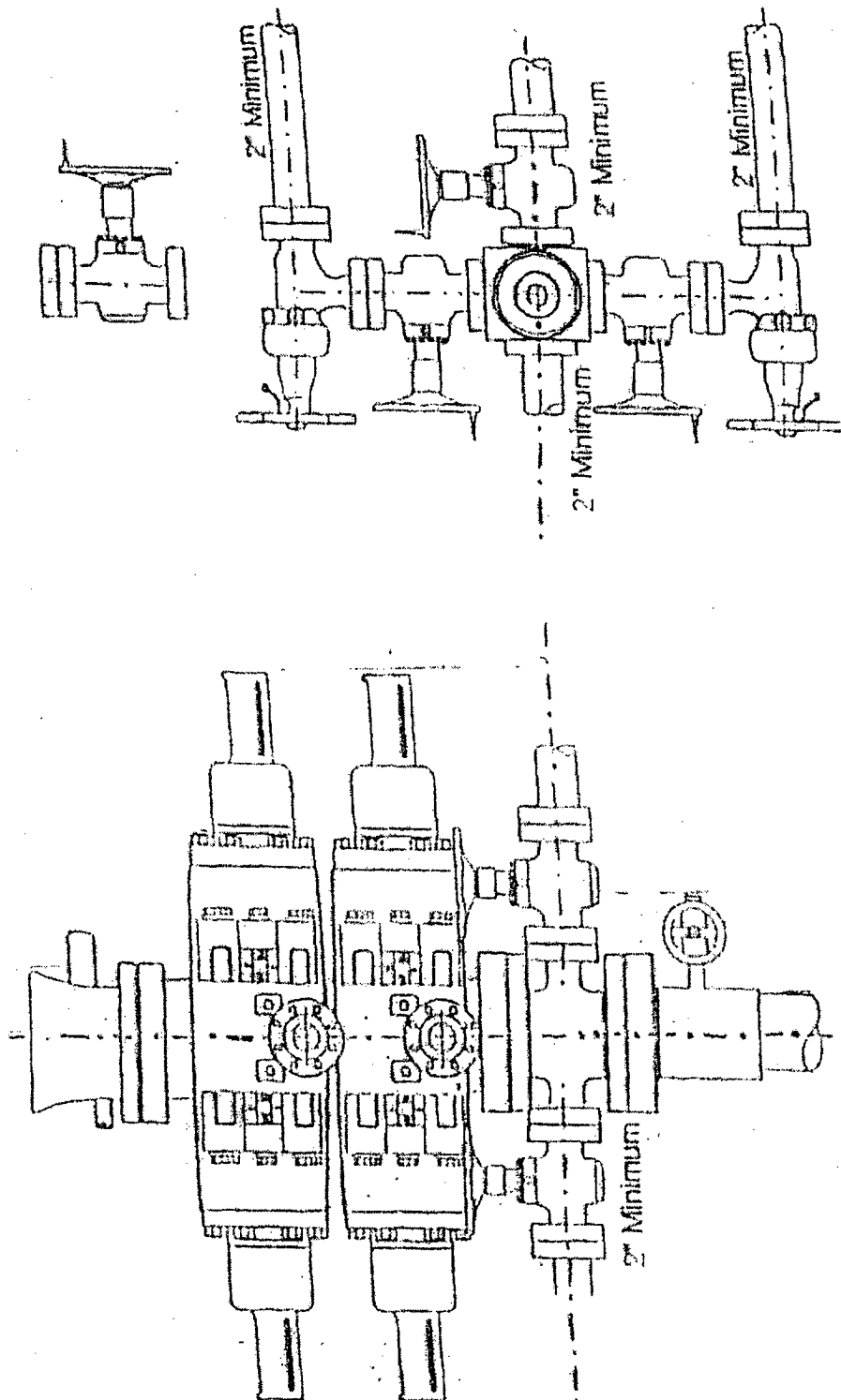
COMPLETION

The location pad is of sufficient size to accommodate all completion activities and equipment. A string of 2-3/8" J-55 4.7#/ft tubing will be run for a flowing string. A Sundry Notice will be submitted with a revised completion program if warranted.

2-M SYSTEM

Black Hills Gas Resources, Inc.

ANNULAR PREVENTOR MAY BE SUBSTITUTED FOR DOUBLE GATE PREVENTORS
BOP PRESSURE TEST TO 1,000 PSI



Hydrogen Sulfide Drilling Operations Plan

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H_2S Safety Equipment and Systems

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetrating the first zone containing or reasonably expected to contain H_2S .

A. Well control equipment:

1. Choke manifold with a minimum of one remote choke.
2. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

B. Protective equipment for essential personnel:

1. Mark II Surviveair 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

C. H₂S detection and monitoring equipment:

1. Two portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 10 ppm are reached.

D. Visual warning systems:

1. Wind direction indicators as shown on well site diagram.
2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate. See example attached.

E. Mud program:

1. The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

F. Metallurgy:

1. All drill strings, casings, tubing, wellhead, blowout preventors, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
2. All elastomers used for packing and seals shall be H₂S trim.

G. Communication:

1. Cellular telephone communications in company vehicles.

H. Well testing:

1. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H₂S environment will use the closed chamber method of testing.

Black Hills Gas Resources

Jicarilla 451-09 #11

API No. 3003927799

735' FNL & 705' FWL (NWNW) Unit D

Section 9 T29N - R03W

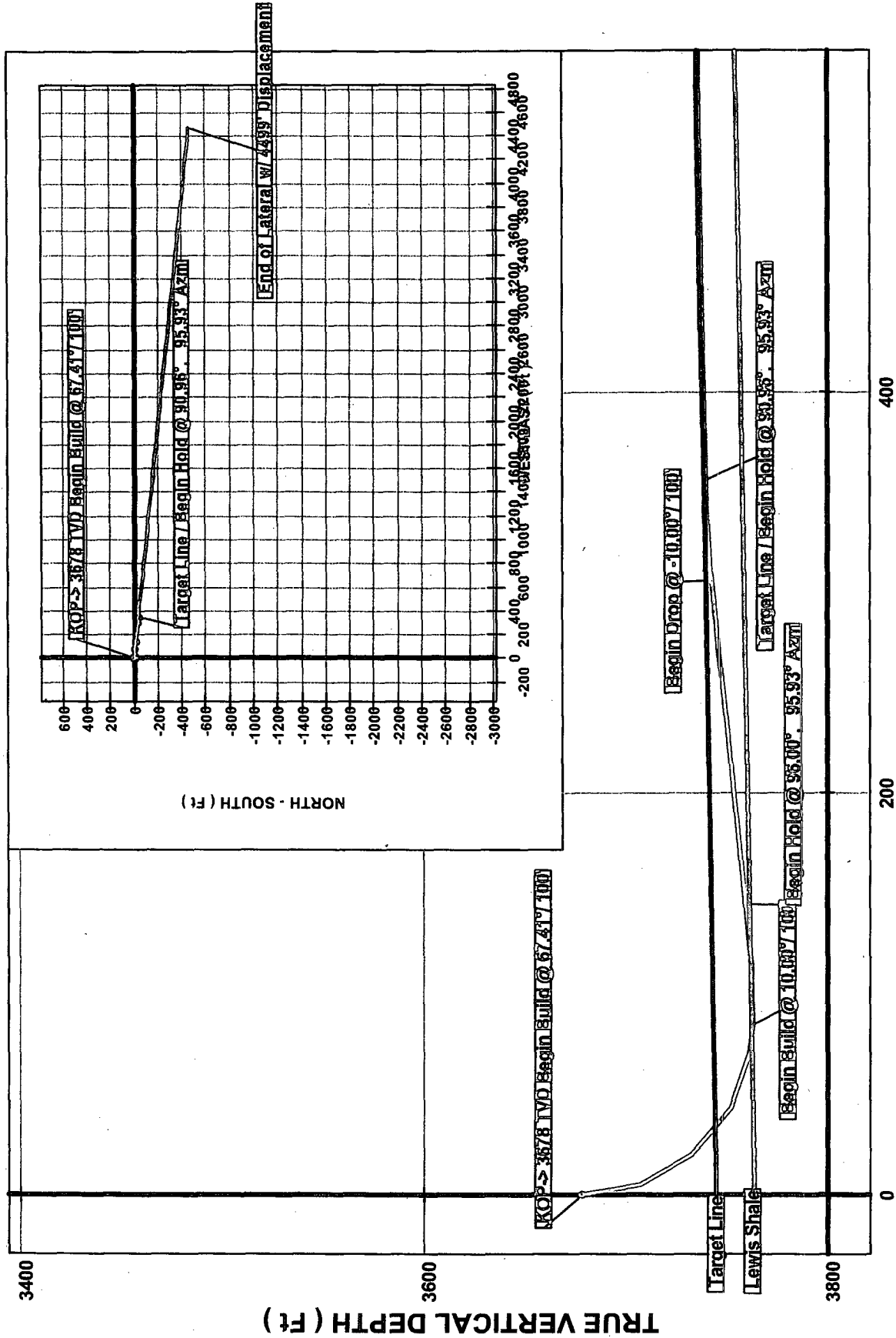
East Blanco Field, Rio Arriba County, New Mexico

Top of Coal:	3575
Bottom of Coal:	3664
KOP:	3678
At Well - (NWNW) SEC 9 T29N - R03W	
Top of PC:	3674
PC Target Line:	3745
Bottom of PC:	3764
Top of Lewis:	3764
At BHL - (NENE) SEC 9 T29N - R03W	
Proposed BHL:	1200 FNL & 100 FEL
Azimuth	95.93
Top of PC:	3660
PC Target Line:	3670

Ground Elevation:	7037'
KB Elevation:	7050' (13' KB)
Surface Casing:	8-5/8" 24# K-55 ST&C @ 277'
Production Casing:	5-1/2" 15.5# K-55 LT&C @ 3803'
Plugback TD:	3777'
Perfs:	San Jose: 1342 - 1465' & 2040 - 2145' (Open)
Perfs:	Nacimiento: 2195 - 2389', 2573 - 2790' & 2862 - 3026' (Open)
Perfs:	Ojo Alamo: 3161 - 3178 (Closed - cmt sqz)
Perfs:	Pictured Cliffs: 3680 - 3750' (Open)
Completion:	Single Completion - San Jose - Nacimiento / Pictured Cliffs
	2-3/8" EUE, On-Off, Packer @ 3593'

Note: Window for kick-off will be cut from 3674 - 90'. KOP is estimated to be at 3678'. Casing collars located by CBL-CCL on 9/7/04 at 3580, 3624, 3669 & 3713' (MD KB).

Job Number: 6-7-05
 Company: BHEP / Mallon Oil
 Lease/Well: Jicarilla 451-09 # 11
 Location: Rio Arriba Co., NM



VERTICAL SECTION (Ft) @ 95.93°